

REMARKS

The present amendments and remarks are in response to the Office Action of June 1, 2004. Claims 17-21 are currently pending.

Reconsideration of the application is respectfully requested in view of the following responsive remarks. For the Examiner's convenience and reference, the Applicant's remarks are presented in the order in which the corresponding issues were raised in the Office Action.

In the Office Action, the following rejections were made:

- (1) claims 17, 18, and 21 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 6,121,371 (hereinafter "Matyjaszewski");
- (2) claim 20 was rejected under 35 U.S.C. 103(a) as being unpatentable over Matyjaszewski in view of U.S. Pat. No. 6,642,301 (hereinafter "White"); and
- (3) claim 19 was rejected under 35 U.S.C. 103(a) as being unpatentable over Matyjaszewski in view of U.S. Pat. No. 6,509,125 (hereinafter "Ito").

Rejections under 35 U.S.C. 102(b)

The Examiner has rejected claims 17, 18, and 21 under 35 U.S.C. 102(b) as being anticipated by Matyjaszewski. Before discussing the rejections, it is thought proper to briefly state what is required to sustain such a rejection. It is well settled that "[a] claim is anticipated only if each and every element as set forth in the claims is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil of California*, 814 F.2d 628, 2 U.S.P.Q. 2d 1051, 1053 (Fed. Cir. 1987). In order to establish anticipation under 35 U.S.C. §102, all elements of the claim must be found in a single reference. *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 231 U.S.P.Q. 81, 90 (Fed. Cir. 1986), *cert. denied* 107 S.Ct. 1606 (1987). In particular, as pointed out by the court in *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1981), *cert denied*, 469 U.S. 851 (1984), "anticipation requires that each and every element of the claimed invention be disclosed in a prior art reference." "The identical invention must be shown in as complete detail as is contained in the...claim." *Richardson v. Suzuki Motor Co.* 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989). Since Matyjaszewski does not teach each and every element of claim 17, the Applicant respectfully requests withdrawal of this rejection.

Matyjaszewski discloses a method for preparing a (co)polymer emulsion or suspension from one or more radically (co)polymerizable monomer in the presence of a system initially comprising a suspending medium, a monomer phase, a surfactant, an initiator, and a catalyst. More specifically, Matyjaszewski teaches, as illustrated in the examples, to combine these elements together in a single batch.

Unlike the method in Matyjaszewski, the instantly claimed invention discloses a method that combines one or more radically transferable atoms or group, a hydrophilic monomer, a ligand, and a catalyst to form an ATRP mix. In a separate and distinct step, the claimed invention combines one or more hydrophobic monomers, a surfactant, and water to form an emulsion. In another separate step, the emulsion and the ATRP mix are added together to form the amphipathic polymer particles. It is clear from the claims as currently pending that these steps are separate and distinct, in that one step forms an ATRP mix, another step forms an

emulsion, and a third step combines the ATRP mix with the emulsion. Thus, this language necessarily requires that the ATRP mix be formed separately and distinctly with respect to the emulsion, and that the two resulting compositions be combined as specified by the claims. Accordingly, the formation of the amphipathic polymer particles is created in several steps opposed to the single batch process disclosed in Matyjaszewski. Thus, the instantly claimed invention is not anticipated by the cited reference, as Matyjaszewski lacks at least one element of the instantly claimed invention. Furthermore, as claim 17 is in condition for allowance and claims 18 and 21 depend from an allowable claim, Applicant respectfully requests withdrawal of this rejection with respect to each rejected claim under this section.

Rejections under 35 U.S.C. 103(a)

The Examiner has also rejected claim 20 under 35 U.S.C. 103(a) as being unpatentable over Matyjaszewski in view of White. The Examiner has indicated that the Matyjaszewski reference does not recognize the use of a crosslinker in an emulsion and the White reference teaches the use of crosslinkers in preparing pigment dispersions. The obviousness rejection is based on a suggestion in Matyjaszewski where the Examiner alleges motivation to those skilled in the art to broaden the range of monomers and to utilize the crosslinking monomers of White.

The motivation cited by the Examiner in Matyjaszewski comes from the following phrase: "(co)polymers from a full range of free radically (co)polymerizable monomers exhibiting the characteristics of 'living' polymerization." The Applicant asserts that this statement does not motivate those skilled in the art to consider using crosslinkers *per se*. Crosslinkers are a very specialized type of composition used in polymerization when there is a desire to cause crosslinking. Thus, if there is no suggestion in Matyjaszewski that there is a desire for crosslinking, how can there be a motivation to combine this reference with a crosslinking reference? A general statement that a "full range" of monomers can be used is tantamount to saying that any monomer can be used, and thus, does not motivate those skilled in the art to consider the use of crosslinkers specifically, which are specialized monomers that are used to promote crosslinking.

Moreover, even if combined as proposed by the Examiner, the resultant combination would still fall short of yielding the claimed invention. Matyjaszewski does not teach a method which creates amphipathic polymer particles from the claimed multi-step process, as described above in the response to the 35 U.S.C. 102 rejections above. Further, since Matyjaszewski requires that the surfactant, ligand, and catalyst be combined in a single batch process to create an ATRP (co)polymer emulsion, it would not be obvious to combine crosslinkers in a separate emulsion prior to mixing with an ATRP mix. For these reasons, withdrawal of this obviousness rejection is respectfully requested.

The Examiner has also rejected claim 19 under 35 U.S.C. 103(a) as being unpatentable over Matyjaszewski in view of Ito. Similarly as described above, there is no motivation to combine Matyjaszewski with Ito. For the same reasons set forth above with respect to the response to the claim 20 rejection, the motivation to select a very specialized monomer cannot arise from mere suggestion that any of a "full range of free radically (co)polymerizable monomers exhibiting the characteristics of 'living' polymerization complement" can be selected for use. The fact that a monomer has a color imparting property has nothing to do with its polymerizable properties. Again, dye monomers are specialized types of monomers that can impart a desired color, and thus, there is no suggestion in Matyjaszewski that such a property is desirable.

Moreover, even if combinable from a motivation point of view, the Ito reference is non-analogous art. In order to determine that the Ito reference is non-analogous with respect to pending claim, a two-part test can be conducted. First, a determination is made as to whether the cited reference is within the inventors' field of endeavor. If it is not within the inventors' field of endeavor, an inquiry as to the second part of the test is required. Particularly, it must be considered whether the reference cited is "reasonably pertinent to the particular problem with which the inventor was involved". Vardon Golf Co. v. Supreme Golf Sales, 1992 U.S. Dist. LEXIS 7515, 7545. (*Citing, In re Wood*, 599 f.2d 1032, 1036 (C.C.P.A. 1979)). In the above case, the Court addressed the first prong of the test and found that a paddleball paddle design is not within the inventor's field of endeavor where

inventor's field of endeavor was golf club design. Id. Additionally, the Court addressed the second prong of the test and determined the difference in magnitude of mechanical stress placed on a paddleball paddle compared to a golf club is too great to make the prior art reasonably pertinent. Id.

In the present case, the Applicant's field of endeavor is to provide a method that creates amphipathic polymer particles. In the Ito reference, the field of endeavor is to produce a color filter and liquid crystal display device. These two fields are noticeably different. The magnitude of difference in resolving the disclosed respective problems makes it too great to make the cited references reasonably pertinent. Ito resolves the particular problem of creating a color filter that utilizes a dye which has a high contrast ratio, minuteness, transparency and color purity, and excellent resistances against heat, light, chemicals, and sublimation, which can be used in liquid crystal displays. The current invention resolves the particular problem of creating amphipathic polymer particles which can be utilized in ink-jet inks which exhibit improved shelf-life, water fastness, smear fastness, and light fastness. Accordingly, the magnitude of difference of utilizing a polymerizable dye to aid in the creation of a color filter of the cited reference compared to creating amphipathic polymer particles of the present invention is too significant to render the cited references reasonably pertinent. Thus, Ito satisfies the requirements indicating that it is non-analogous art, and thus, this reference cannot properly be used in making this rejection, as supported by the relevant case law. Thus, on these alternative grounds, withdrawal of this obviousness rejection is also respectfully requested.

In view of the foregoing, Applicant believes that claims 17-21 present allowable subject matter and allowance is respectfully requested. If any impediment to the allowance of these claims remains after consideration of the above remarks, and such impediment could be removed during a telephone interview, the Examiner is invited to telephone Susan E. Heminger at (650) 236-2738 so that such issues may be resolved as expeditiously as possible.

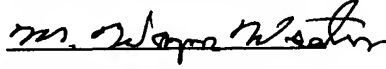
Docket No.: 10010060-7
Serial No.: 10/698,194

7

Please charge any additional fees except for Issue Fee or credit any overpayment to Deposit Account No. 08-2025.

Dated this 1st day of September, 2004.

Respectfully submitted,



M. Wayne Western
Attorney for Applicant
Registration No. 22,788

Gary P. Oakeson
Attorney for Applicant
Registration No. 44,266

Of:

THORPE NORTH & WESTERN, LLP
8180 South 700 East, Suite 200
Sandy, Utah 84070
(801) 566-6633

On Behalf Of:

HEWLETT-PACKARD COMPANY
1501 Page Mill Road
Mailstop 1197
Palo Alto, CA 94304-1126
(650) 852-8063